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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,549	11/07/2003	Jae-Hong Kim	2557-000187/US	8217
30593	7590	06/01/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			TRINH, HOA B	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/702,549

Applicant(s)

KIM ET AL.

Examiner

Vikki H. Trinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 and 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,11-13 and 15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/19/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Acknowledgement

Claims 1-2, 4-13, 15-20 are pending. Claims 6-10, 12, 16-20 have been withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5, 11, and 13,15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanabe (JP 08037276 A).

As to claim 1, and 11, Tanabe discloses a device having a lead frame with leads 2 (abstract) wherein the leadframe body is capable of being used as a lead-on-chip (LOC) type, a plurality of inner leads 2 formed on the leadframe body; and a locking tape 9 (abstract) being adhered to tips of the inner leads 2 (abstract), whereby the locking tape 9 and the inner leads 2 are cut off together (abstract)

As to claims 2 and 15, the inner leads 2 (abstract) are made using a stamping (punching) process. Note that the term “punching” carries the same meaning as the word as the word “stamping”.

As to claims 5 and 13, the locking tape 9 (abstract) is one-sided tape having an adhesive on one side thereof, the side having adhesive is being adhered to the inner leads 2 (abstract).

5. Claims 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Chan et al. (6,236,107) (hereinafter Chan).

As to claims 11 and 12, Chan discloses a LOC device having a lead frame 10 (fig. 3) with leads 75 (fig. 3) and a locking tape 20 being doubled sided (col. 2, line 55), whereby the tape 20 ends at each end of the leads (fig. 3).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanabe, as applied to claim 1, in view of Chan et al. (6,236,107) (hereinafter Chan).

Tanabe discloses the invention substantially as claimed. However, Tanabe does not explicitly teach that the tape is a “double-sided” tape.

Chan discloses an LOC device having a double-sided tape 20 (fig. 3) adhered to the leads 75 (fig. 3) of the lead frame 10 (fig. 3).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Tanabe with a double-sided tape, as taught by Chan, so as to provide the adhesion being on both sides of the tape.

Response to Arguments

3. Applicant's arguments filed March 16, 2005, have been fully considered but they are not persuasive.

As to claims 1-2, 5, 11, and 13,15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanabe (JP 08037276 A), applicant contends that figures 1 and 4 of Tanabe do not show a LOC type. However, the examiner notes that Tanabe's leadframe is capable of being used in a LOC type environment. Therefore, the rejection is maintained.

Further, claims 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Chan et al. (6,236,107) (hereinafter Chan). Here Chan explicitly states that the leadframe is used as a LOC type.

With respect to claim 4, the claim is rejected under 35 USC 103(a) as being unpatentable over Tanabe in view of Chan. As stated in the above rejection, Tanabe lacks the teaching of the tape being a “double-sided” tape. Chan cures Tanabe by disclosing a double-sided tape 20 (fig.

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3) adhered to the leads 75 (fig. 3) of the lead frame 10 (fig. 3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Tanabe with a double-sided tape, as taught by Chan, so as to provide the adhesion being on both sides of the tape.

For the foregoing reasons, the rejection is maintained.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Vikki Trinh whose telephone number is (571) 272-1719. The Examiner can normally be reached from Monday-Friday, 9:00 AM - 5:30 PM Eastern Time. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Wael Fahmy, can be reached at (571) 272-1705. The office fax number is 703-872-9306.

Any request for information regarding to the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Also, status information for published applications may be obtained from either Private PAIR or Public Pair. In addition, status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see

If you have questions pertaining to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Lastly, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions as of June 2004. Paper copies of foreign patents and non-patent literature will continue to be included with office actions. These cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. patent or patent application publications will not be granted.

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HOWARD WEISS
PRIMARY EXAMINER